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## CLAIMS

What is claimed is:

1. A method comprising the step of:  
2. receiving a media input stream;  
3. saving data corresponding to the media input stream in a buffer continuously  
4. during a time interval; and  
5. selecting portions of the buffer for storage in a media file on a mass storage  
6. device responsive to a punch in signal and a punch out signal wherein the media  
7. file contains input stream data for a time window greater than a time window  
8. between the punch in signal and the punch out signal.

1. 2. The method of claim 1 wherein the media file comprises:  
2. a first record handle before a punch in point;  
3. a second record handle between a punch out point and the end of the media  
4. file; and  
5. a record interval between the punch in point and the punch out point.

1. 3. The method of claim 1 wherein the media input stream is an audio stream  
2. and the time interval is a recording session.

1. 4. The method of claim 3 further comprises the steps of :  
2. editing an event list for an audio track by inserting an event corresponding to  
3. the media file; and  
4. adjusting an offset and a length of the event to include a portion of at least  
5. one record handle.

1. 5. The method of claim 4 wherein in the first record handle is approximately  
2. one second of audio data preceding the punch in signal and the second record  
3. handle is approximately one second of audio data following the punch out signal.

1    6. The method of claim 1 further comprising the step of allocating a portion of  
2    the buffer to each of a plurality of input channels wherein a plurality of media input  
3    streams source data to the plurality of input channels.

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7. A method of claim 1 wherein the step of selecting comprises the steps of:  
2    tagging a buffer block filled preceding the punch in signal with a storage tag;  
3    tagging all buffer blocks between the punch in signal and punch out signal  
4    with a storage tag; and  
5    tagging a buffer block filled following the punch out signal with a storage tag.

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1    8. The method of claim 7 further comprising the steps of:  
2    checking a buffer block for a storage tag prior to reallocating the buffer block to  
3    be overwritten;  
4    storing all contiguous buffer blocks containing a storage tag in the mass  
5    storage device as the media file; and  
6    reallocating the buffer block to be overwritten if no storage tag exist or after  
7    the data has been stored to the media file if a storage tag exists.

1    9. A system comprising:  
2    a signal processor for processing a media input stream;  
3    a buffer coupled to the signal processor, the buffer for continuously loading  
4    data corresponding to the media input stream while the media input stream exists;  
5    and  
6    a mass storage device coupled to the buffer by a bus, the mass storage device  
7    for storing a media file derived from the media input stream comprising media  
8    samples preceding a punch in signal, media samples following a punch out signal,  
9    and a plurality of media samples between the punch in signal and the punch out  
10   signal.

1    10. The system of claim 9 further comprises a host processor for controlling the  
2 storage of data from the buffer to the mass storage device.

1    11. The system of claim 9 wherein the buffer is both loaded and unloaded in a  
2 first in first out (FIFO) manner such that once the buffer is full an oldest block of  
3 data in the buffer will be reallocated to be overwritten on a next load.

1    12. The system of claim 11 wherein responsive to a punch in signal a data block  
2 earlier in time than the punch in signal is tagged for storage to the mass storage  
3 device.

1    13. The system of claim 11 wherein if the oldest block of data is tagged for storage  
2 the oldest block will be stored to the mass storage device before being reallocated.

1    14. The system of claim 13 wherein any block containing data from one second  
2 before punch in until one second after punch out is tagged for storage in a single  
3 media file on the mass storage device.

1    15. The system of claim 9 wherein the buffer is a random access memory (RAM).

1    16. The system of claim 15 wherein the input stream comprises up to sixteen  
2 channels and the RAM is logically allocated amongst the channels.

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